CLAIMS

1. A liquid crystal display device wherein the image signal to be displayed is written into a liquid crystal display panel while a backlight is activated intermittently within one frame period, comprising:

a section for detecting the type of the image content to be displayed; and

a section for variably controlling the illumination duration of the backlight based on the detected type of the image content.

2. The liquid crystal display device according to Claim 1, wherein the backlight emits a flash of light over the full screen every one frame period in synchronization with the vertical synchronizing signal supplied to the liquid crystal display panel.

3. The liquid crystal display device according to Claim 1, wherein the backlight is operated so that multiple luminous sections are activated, one to the next, scan-wise in synchronization with the vertical and horizontal synchronizing signals supplied to the liquid crystal display panel.

4. The liquid crystal display device according to any one of Claims 1 to 3, wherein the luminous intensity of the backlight is varied in accordance with the illumination duration of the backlight.

5. The liquid crystal display device according to any one of Claims 1 to 4, wherein the gray scale levels of the input image signal are varied in accordance with the illumination duration of the backlight.

6. The liquid crystal display device according to any one of Claims 1 to 4, wherein the gray scale voltages applied to the liquid crystal display panel in response to the input image signal are varied in accordance with the illumination duration of the backlight.

7. The liquid crystal display device according to any one of Claims 1 to 6, wherein the frame frequency of the input image signal is varied based on the type of the image content.

8. The liquid crystal display device according to any one of Claims 1 to 7, wherein the type of the image content to be displayed is detected based on the contents information included in the broadcast data.

9. The liquid crystal display device according to any one of Claims 1 to 7, wherein the type of the image content to be displayed is detected based on the contents information obtained from external media.

10. The liquid crystal display device according to any one of Claims 1 to 7, wherein the type of the image content to be displayed is detected based on the video source select command information input by the user.

11. A liquid crystal display device wherein the image signal

to be displayed and the black display signal are written into a liquid crystal display panel within one frame period, comprising:

a section for detecting the type of the image content to be displayed; and

a section for variably controlling the duration in which the black display signal is supplied to the liquid crystal display panel based on the detected type of the image content.

12. The liquid crystal display device according to Claim 11, wherein the luminous intensity of the backlight that illuminates the liquid crystal display panel is varied in accordance with the application duration of the black display signal.

13. The liquid crystal display device according to Claim 11 or 12, wherein the gray scale levels of the input image signal are varied in accordance with the application duration of the black display signal.

14. The liquid crystal display device according to Claim 11 or 12, wherein the gray scale voltages applied to the liquid crystal display panel in response to the input image signal are varied in accordance with the application duration of the black display signal.

15. The liquid crystal display device according to any one of Claims 11 to 14, wherein the type of the image content to be displayed is detected based on the contents information

16. The liquid crystal display device according to any one of Claims 11 to 14, wherein the type of the image content to be displayed is detected based on the contents information obtained from external media.

17. The liquid crystal display device according to any one of Claims 11 to 14, wherein the type of the image content to be displayed is detected based on the video source select command information input by the user.

18. (After amendment) A liquid crystal display device wherein display duration of the image signal and non-display duration are provided in one frame period, comprising:

a section for detecting the type of the image content to be displayed; and

a section for variably controlling the ratio of the display duration of the image signal in the one frame period, based on the detected type of the image content.

19. (After amendment) The liquid crystal display device according to Claim 18, wherein the gray scale levels of the input image signal are varied in accordance with the ratio of the display duration of the image signal in the one frame period.

20. (After amendment) The liquid crystal display device according to Claim 18, wherein the gray scale voltages applied to the liquid crystal display panel in response to the input

image signal are varied in accordance with the ratio of the display duration of the image signal in the one frame period.

21. The liquid crystal display device according to any one of Claims 18 to 20, wherein the type of the image content to be displayed is detected based on the contents information included in the broadcast data.

22. The liquid crystal display device according to any one of Claims 18 to 20, wherein the type of the image content to be displayed is detected based on the contents information obtained from external media.

23. The liquid crystal display device according to any one of Claims 18 to 20, wherein the type of the image content to be displayed is detected based on the video source select command information input by the user.

24. A liquid crystal display device wherein the image signal to be displayed is written into a liquid crystal display panel while a backlight is activated intermittently within one frame period, comprising:

a section for detecting a user's instructional input; and

a section for variably controlling the illumination duration of the backlight based on the detected user's instructional input.

25. The liquid crystal display device according to Claim 24, wherein the backlight emits a flash of light over the

full screen every one frame period in synchronization with the vertical synchronizing signal supplied to the liquid crystal display panel.

26. The liquid crystal display device according to Claim 24, wherein the backlight is operated so that multiple luminous sections are activated, one to the next, scan-wise in synchronization with the vertical and horizontal synchronizing signals supplied to the liquid crystal display panel.

27. The liquid crystal display device according to any one of Claims 24 to 26, wherein the luminous intensity of the backlight is varied in accordance with the illumination duration of the backlight.

28. The liquid crystal display device according to any one of Claims 24 to 27, wherein the gray scale levels of the input image signal are varied in accordance with the illumination duration of the backlight.

29. The liquid crystal display device according to any one of Claims 24 to 27, wherein the gray scale voltages applied to the liquid crystal display panel in response to the input image signal are varied in accordance with the illumination duration of the backlight.

30. The liquid crystal display device according to any one of Claims 24 to 29, wherein the frame frequency of the input image signal is varied based on the user's instruction.

31. The liquid crystal display device according to any one of Claims 24 to 30, wherein the illumination duration of the backlight is varied based on the video source select command information input by the user.

32. The liquid crystal display device according to any one of Claims 24 to 30, wherein the illumination duration of the backlight is varied based on the video adjustment command information input by the user.

33. A liquid crystal display device wherein the image signal to be displayed and the black display signal are written into a liquid crystal display panel within one frame period, comprising:

a section for detecting a user's instructional input; and

a section for variably controlling the duration in which the black display signal is supplied to the liquid crystal display panel based on the user's instructional input.

34. The liquid crystal display device according to Claim 33, wherein the luminous intensity of the backlight that illuminates the liquid crystal display panel is varied in accordance with the application duration of the black display signal.

35. The liquid crystal display device according to Claim 33 or 34, wherein the gray scale levels of the input image signal are varied in accordance with the application duration

of the black display signal.

36. The liquid crystal display device according to Claim 33 or 34, wherein the gray scale voltages applied to the liquid crystal display panel in response to the input image signal are varied in accordance with the application duration of the black display signal.

37. The liquid crystal display device according to any one of Claims 33 to 36, wherein the application duration of the black display signal is varied based on the video source select command information input by the user.

38. The liquid crystal display device according to any one of Claims 33 to 36, wherein the application duration of the black display signal is varied based on the video adjustment command information input by the user.

39. A liquid crystal display device wherein display duration of the image signal and non-display duration are provided in one frame period, comprising:

a section for detecting a user's instructional input; and

a section for variably controlling the ratio of the display duration of the image signal in the one frame period, based on the detected user's instruction.

40. The liquid crystal display device according to Claim 39, wherein the gray scale levels of the input image signal are varied in accordance with the ratio of the display duration

of the image signal in the one frame period.

41. The liquid crystal display device according to Claim 39, wherein the gray scale voltages applied to the liquid crystal display panel in response to the input image signal are varied in accordance with the ratio of the display duration of the image signal in the one frame period.

42. The liquid crystal display device according to any one of Claims 39 to 41, wherein the ratio of the display duration of the image signal in the one frame period is varied based on the video source select command information input by the user.

43. The liquid crystal display device according to any one of Claims 39 to 41, wherein the ratio of the display duration of the image signal in the one frame period is varied based on the video adjustment command information input by the user.